## **METHODS**

## A. SITE SELECTION FOR SURVEY WORK

The N.C. Natural Heritage Program database on rare and endangered plants and animals and natural communities was reviewed by Heritage staff. Topographic, soil, and orthophoto maps were also reviewed to identify potential sites for survey work. To identify other potential significant natural areas suitable for exploration, the sub-contractees Zack Murrell, Carl Nordman, and Ann Kelly, contacted local citizens, foresters, and other biologists familiar with the 17-county study area. From these data sources a list of natural areas for potential survey work was compiled in early 1991.

## B. SURVEY WORK

Before survey work began, Murrell, Nordman, and Kelly met with the staff of the N.C. Natural Heritage Program to receive guidelines on conducting field work. They were provided with Site Survey Report forms designed by the N.C. Natural Heritage Program (see Appendix) to be completed for sites newly identified as significant natural areas.

Survey work began in the early spring of 1991 and continued into the fall of 1992. This work consisted primarily of inventories of poorly known sites or sites not previously surveyed, and secondarily of brief visits to sites already inventoried. The later was done to determine if the sites were still significant natural areas. Many of the sites not previously inventoried were surveyed and found to have been destroyed by development or clearcutting or were found to contained vegetation not considered to be mature or of high quality.

Murrell, Nordman, and Kelly surveyed all 17 counties, except Durham, Orange, and Wake which had previously been inventoried county-wide (Sutter et al. 1987, Sather and Hall 1988, and LeGrand 1987, respectively). Specifically, Murrell surveyed sites in Edgecombe, Franklin, Halifax, Nash, Northampton, Vance, and Warren counties; Nordman surveyed sites in Greene, Johnston, Lenoir, Wayne, and Wilson counties; and Kelly surveyed sites in Granville and Person counties.

The researchers did not make a conscious attempt to include in the inventory representatives of all of the natural communities present in the A/P III study area. Nor did the researchers make an attempt to survey for the best quality sites of rare and endangered species. In essence, the researchers attempted to survey sites based on the extent and condition of the natural communities, looking for coherent, defensible natural areas as well as rare natural communities.